



## State of Nevada – Department Of Personnel

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### CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
<b>STAFF II, ASSOCIATE ENGINEER</b>	<b>37*</b>	<b>B</b>	<b>6.228</b>
<b><u>OPTIONS: DEPARTMENT OF TRANSPORTATION</u></b>			
A. Construction Division			
B. Environmental Services Division			
C. Location, Photogrammetry & Cartography Division			
D. Maintenance Division			
E. Materials and Testing Division			
F. Operations Analysis Division			
G. Road Design Division			
H. Safety Engineering Division			
I. Structural Design Division			
J. Districts			
<b><u>DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES</u></b>			
K. Division of Environmental Protection			
L. Division of State Parks			
M. Division of Water Planning			
N. Division of Water Resources			
<b><u>DEPARTMENT OF HUMAN RESOURCES</u></b>			
O. Bureau of Health Protection Services			
<b><u>UNIVERSITY OF NEVADA</u></b>			
P. UNLV - Telemedia Services			
Q. UNR - Department of Chemistry			

Under general supervision, perform engineering work requiring some professional training and experience demonstrating capacity for independent work requiring familiarity with standards and accepted engineering practices outlined in guides and agency standards; typically responsible for assigning and reviewing work of lower-level employees and, in a university setting, supervising students.

Positions at the Staff II level perform engineering functions requiring the exercise of judgment in the analysis of diverse and complex data that impact daily operations and implementation of established policy and procedures. Activities consist of duties that produce an analysis, recommendation, or provide significant advice used by others in making decisions. Positions at this level deal with management at or above the supervisor's level to include both internal and external contacts for the purpose of answering questions requiring explanations or interpretations of standard procedures and solving problems involving conflict requiring interpretation/ application of policy.

Perform related duties as assigned.

**\* Reflects a 2-grade, special salary adjustment authorized by the 2001 Legislature to improve recruitment and retention.**

**DEPARTMENT OF TRANSPORTATION**

**Construction Division**

Conduct on-site construction inspections to ensure conformance to applicable specifications and recommend appropriate corrective action when needed.

Provide quality control for construction activities; prepare reports; review field data for completeness and content and direct changes to data to conform to established guidelines; and analyze data utilizing established formulas designed for specification conformance analysis to determine the percent conforming to applicable specifications.

Review the plans and special provisions package for each project to minimize errors and omissions in the final contract plans; participate in preconstruction conferences, contract plans and special provision review meetings, final inspections of construction projects, and field traffic control reviews of construction projects in progress to analyze the effectiveness of situations or conditions; write and coordinate agreements for consultant engineering; and coordinate projects that require local entities' participation in the utilization of their personnel to perform work.

Review and process contractor payments to prevent quantity errors and incorrect payments; review and process contract change orders submitted from the districts to ensure that change order amount is correct and that reasons for the change order are justified.

Prepare final reports and Construction Engineering Manpower Management (CEMMS) reports for all construction contracts awarded by the department. Final reports provide an audit of all contract pay documents so that a final payment may be made to the contractor. CEMMS reports provide staffing guidelines for each construction contract.

**Environmental Services Division**

Provide water quality clearance for highway projects; write water quality technical reports for inclusion in environmental documents; prepare summary from technical reports for the Draft Environmental Impact Statement and the Final Environmental Impact Statement; respond to comments on the Draft Environmental Impact Statement; and ensure the department is in compliance with federal and State regulations with respect to water quality.

**Operations Analysis Division**

Analyze variables which affect pavement performance and utilize the results to maximize the pavement's performance and minimize its cost; conduct studies on pavement rehabilitation techniques to provide criteria for pavement performance prediction; develop project priorities for statewide resurfacing, restoration and rehabilitation projects; and make recommendations for revenue increases required to bring the condition of the State's highways to an acceptable service level.

Perform cost allocation studies to ascertain whether highway users are contributing to the State Highway Fund in proportion to their share of the responsibility for constructing, maintaining, and administering Nevada's highway program; and participate in long-term financial planning to predict future revenue.

**Road Design Division**

**Landscape, Maintenance, Railroad and Erosion Control Projects:** Design landscape, maintenance, railroad and erosion control projects; coordinate time schedules and attend meetings with divisions involved in the project and provide project related data to them; participate in the preliminary design field study; design traffic control to facilitate safe and continuous flow of vehicular and pedestrian traffic through the work zone; calculate quantities required for project construction; prepare preliminary and engineer's estimate to obtain a final estimate for changes to the plans and/or specifications; organize final plans; prepare revised agreement estimates; and review consultant design work to ensure adherence to department policy and procedure.

**DEPARTMENT OF TRANSPORTATION** (cont'd)

**Road Design Division** (cont'd)

**Landscape, Maintenance, Railroad and Erosion Control Projects** (cont'd)

Provide consultation on landscape projects to include developing plant lists that provide a water saving, aesthetically pleasing product; advising department divisions on various vegetation and irrigation systems; and consulting with the Maintenance Division concerning problems related to existing systems and providing recommended solutions.

Determine if pit and disposal sites are feasible; authorize approval for implementation of the pit site; and acquire a written release for the disposal site from the property owner.

**Roadway Design:** Review the design and calculations of roadway projects to ensure plans are complete, accurate and in compliance with federal and State standards; review contract requirements for clarity and completeness; examine summaries for inclusion of theoreticals, totals of aggregates, construction signs, traffic control items, roadway excavation, borrow embankment and general notes; and review information in change orders.

**Specifications:** Compile and write special provisions to include describing restrictions or requirements pertaining to the project; describing the work to be done, the materials required, how the work is to be accomplished and measured, and how payments are made; and describing the type of material needed and identifying the specific performance or test to which the material must conform.

Analyze plans and items of work by studying plans submitted to the Specifications Section of the division to determine what the project is to accomplish, what methods are to be used and what items of work are involved and to determine whether requirements are clearly stated by the plans or whether requirements need to be addressed in the special provisions.

Follow up on projects that have been advertised for bids by writing supplemental special provisions when necessary to ensure the changes are effected before bids are submitted.

**Standard Plans:** Provide on-going development of the department's design manual; perform yearly review of standard plans in order to incorporate recommended standards provided by all department divisions and districts, the Federal Highway Administration, and members of the multi-disciplinary review committee; and work on special and experimental projects.

**Traffic Design:** Design traffic signal systems and highway lighting systems, traffic sign plans, contract plans showing new traffic sign locations, non-standard signs, overhead traffic sign support structures, traffic striping detail, and special traffic sign details.

**Districts**

Inspect and review State maintained street and highway signs and markings to determine if traffic safety or capacity could be improved through modifications; recommend modification of signs or markings; and review modified areas to determine effectiveness of changes.

Review major projects, subdivisions and parcel maps and provide recommendations and requirements to the appropriate county or city planning agencies concerning the project's impact on department facilities in order to protect facilities and mitigate the impact of future development.

Review traffic control plans submitted for permitted encroachment work on the highway system to ensure compliance with established standards and guidelines; approve acceptable traffic control plans; and prepare traffic control plans for State maintenance work when approval by local entity is required or requested.

**DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES**

**Division of Environmental Protection**

**Federal Facilities Bureau and Facility Management Branch:** Review permit applications and write permits for industries proposing to operate hazardous waste treatment, incinerator, storage or disposal facilities in the State; review applications, engineering reports and plans for compliance with State and federal requirements and to determine if the facilities utilize sound engineering practices; develop permit conditions; write draft permits; and schedule and attend public meetings and hearings.

Oversee the compliance of regulated facilities; conduct inspections of hazardous waste facilities for compliance with regulations and permit conditions; recommend enforcement action for permit and law violations based on inspection findings; monitor payment of annual operating fees, quarterly volume fees and permit review fees to ensure timely receipt of payment from each facility; and approve requests for disposal of waste streams at facilities operated on lands owned by the State.

Implement site remediation measures and corrective action at regulated facilities; review plans and proposals for corrective action at facilities undergoing site remediation; and determine acceptable and appropriate clean-up standards for sites undergoing corrective action or other remediation activity.

**Bureau of Wastewater Treatment Services/Bureau of Federal Facilities:** Review facility plans, design reports, construction plans and specifications, operation and maintenance manuals and effluent management plans to ensure compliance with federal and State laws and regulations, discharge permit requirements and water quality standards.

Perform compliance inspections of operating wastewater treatment plants and inspections of plants under construction to determine if the treatment plant is in compliance with discharge permit requirements and that the plant is being operated and maintained properly; perform construction inspections to determine that the treatment plant is being constructed in accordance with approved plans and specifications and that the construction management is adequate; prepare inspection reports; and provide technical assistance to plant operators to optimize the plant's performance.

**Division of Water Planning**

Collect, organize and compile data associated with water resources; provide information to State and federal agencies, the Governor's office, the public and other states; prepare and distribute data generated; and maintain database files to provide a library for research practices for the division and the public.

Perform hydrographic basin abstract functions; research and investigate new sources of water to include importation, conservation, desalinization, and existing water supplies; and prepare reports for presentations and publications.

**Division of Water Resources**

Perform technical and statutory review of water right applications for publication; answer inquiries regarding Nevada Water Law and division policies and procedures from government agencies, private citizens, real estate companies, consultants, and utility companies; and advise the procedures and fees required for filing applications to appropriate water, applications to change water right permits, proofs of completions, proofs of beneficial use, and extensions of time with the State Engineer.

Perform field investigations; inspect well drilling and abandonment to ensure well operations conform to Nevada Water Law; perform proof of beneficial use inspections to determine if use of water conforms to Nevada Water Law and terms of the permit, and meets the requirements for issuance of a certificate; draft certificates for review by the certificate committee; and inspect applications and permits to determine if water usage and well operations will be or are in compliance with Nevada Water Law and the terms of the permit.

Conduct ground water pumpage field inventories to monitor ground water depletions and prepare comprehensive reports of the inventories.

**DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES**

**Division of Water Resources** (cont'd)

Prepare written decisions on hearings and assist the Hearings Officer in the hearings process in order to present written decisions that include findings of fact and conclusions of law for the State Engineer's review.

Review tentative and final subdivision maps and recommend approval or denial to the local planning commission based on water rights information and geohydrologic data.

**DEPARTMENT OF HUMAN RESOURCES**

**Bureau of Health Protection Services**

Review and recommend approval of engineering plans and specifications for the construction of public drinking water systems, public swimming pools and spas, public accommodations, State Public Works Board projects and schools, jails, food and drink establishments, recreational vehicle parks and individual wastewater disposal systems in order to code the standards which apply to the design for the purpose of protecting the public and the environment from dangerous health impacts and to promote proper sanitation and safety in the product.

Perform inspection and investigation functions to ensure the promotion of acceptable standards of public health, sanitation, cleanliness and safety by inspecting the construction and operation of facilities and systems regulated by the State Board of Health to determine the facts, causal factors, responsibility for the problem and the severity of degradation of the problem; prescribing corrective action and, upon satisfactory correction, removing restrictions.

Provide technical consultation to the private and public sector and at engineering functions to enhance and promote public health, sanitation, cleanliness and safety in the State.

**UNIVERSITY OF NEVADA**

**UNLV - Telemedia Services**

Design and direct the implementation of media systems to meet the instructional, research and public service needs of the University; maintain the University's media electronic equipment; provide technical direction for all university electronic media productions to ensure quality control; prepare and maintain documentation of Telemedia Services technical systems; compile and/or secure the files for the operation and maintenance manuals for technical systems; consult with manufacturers and suppliers regarding technical problems with systems; and serve as technical advisor and resource for self-learning centers, lecture halls and seminar areas.

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**MINIMUM QUALIFICATIONS**

**SPECIAL NOTES AND REQUIREMENTS:**

- \* Positions in this class may require specialized education and experience which will be identified at the time of recruitment.
- \* Specific duties and knowledge, skills and abilities for those options not described in this class specification may be determined at the time positions are classified. Positions being classified must meet the entry level knowledge, skills and abilities common to all options. Judgment must be applied in determining the degree to which a specific position being classified meets the intent of the class concepts. However, applicants must meet the entry level knowledge, skills and abilities common to all options.

## OPTIONS

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## MINIMUM QUALIFICATIONS (cont'd)

SPECIAL NOTES AND REQUIREMENTS (cont'd)

- \* Employees in this class who are not registered professional engineers may not represent themselves as such to other persons or entities.

**EDUCATION AND EXPERIENCE:** Bachelor's degree from an accredited college or university in civil engineering or closely related engineering field and two years of professional engineering experience; **OR** certified as an Engineering Intern and two years of professional engineering experience in civil engineering or closely related engineering field; **OR** two years of experience comparable to the Staff I, Associate Engineer or Supervisor I, Associate Engineer. *(See Special Notes and Requirements)*

**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES** (required at time of application):

ALL OPTIONS

**Working knowledge of:** mathematics, trigonometry, algebra, geometry and advanced math to perform daily calculations and work tasks. **Knowledge of:** chart, graph and table formatting; where to go within the organization for needed information; computer hardware and software programs necessary to complete job assignments. **Ability to:** communicate orally using appropriate vocabulary and grammar to obtain and provide information and explain policies and procedures; write engineering reports and other technical documents; work as part of a team; understand and perform statistical computations; establish rapport and gain trust of others; make logical engineering judgments and decisions; read and understand general engineering information from plans, drawings, manuals, correspondence, reports, graphs and memos; operate personal computers; analyze technical information, problems, situations, practices or procedures to identify relevant concerns, formulate logical and objective conclusions, and recognize alternatives and their implications; adapt to changes in workload and adjust priorities quickly as circumstances dictate.

DEPARTMENT OF TRANSPORTATIONConstruction Division

**Working knowledge of:** highway specification and engineering principles; current principles and practices of engineering related to highway construction to properly analyze plans and specifications; Critical Path Method of scheduling projects.

Environmental Services Division

**Working knowledge of:** hydrology. **Engineering knowledge of:** stormwater systems. **Ability to:** perform water quality tests; compute water quality data; write technical reports on highway impacts on water quality and floodplains which are suitable for publication in the Draft Environmental Impact Statement; read technical, legal and scientific documents such as inter-local agreements, best management practices for stormwater, and scientific research reports on stormwater.

Road Design Division

**Roadway Design - Working knowledge of:** guidelines, regulations and standards mandated by federal, State, city and county sources as contained in the various manuals for transportation engineering; checking necessary to produce or check a complete set of contract plans and to effectively analyze problems and solutions. **Ability to:** review and check calculations, plans and design work; interpret roadway plans and specifications; interpret structural drawings and specifications pertaining to bridge installations on roadways and interchange designs; compare/inspect existing roadway plans and judge whether they are similar to or different from prescribed current standards. **Skill in:** cost estimating, planning and preparation of a project with multiple funding sources.

**Standard Plans - Ability to:** determine cost effectiveness of products or services proposed for use by the department; determine resources within the department for use as support; utilize engineering drafting techniques to convey information to support units.

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**MINIMUM QUALIFICATIONS (cont'd)****ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (cont'd)****Environmental Services Division (cont'd)**

**Traffic Design - Knowledge of:** federal and State guidelines pertaining to signs, pavement markings and traffic control. **Ability to:** prepare interlocal agreements with county and city officials for the purpose of constructing and maintaining signal and lighting systems.

**Districts**

**Knowledge of:** principles set forth in federal and State guidelines for proper use of traffic control devices, such as signs, striping and lighting. **Ability to:** draw sketches of traffic control plans and changes to existing highway signage and marking to enable crews to place signs, barricades and markings.

**DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES****Division of Environmental Protection**

**Federal Facilities Bureau and Facility Management Branch - Working knowledge of:** engineering principles relative to chemical processes, chemistry, construction techniques, calculus, surveying, soils properties and settlement analysis, hydrology, groundwater transport, treatment and technologies. **Ability to:** manage and prioritize permitting and remediation projects based on the environmental importance, relative risk to the environment or need for the facility in the State; negotiate with responsible parties for cleanups of contaminated sites and develop consent agreements which define each party's responsibilities and liabilities.

**Division of Water Planning**

**Ability to:** organize, arrange, store and manipulate data effectively; organize information to be given to other agencies and the public.

**Division of Water Resources**

**General knowledge of:** the division's book records and publications; well drilling practices sufficient to monitor well driller's regulatory compliance hydrology and hydrographic features sufficient to recognize what terrain features indicate about ground water movement and interpret the lithology of well driller's reports. **Knowledge of:** the Nevada Water Law. **Ability to:** operate and understand calculators, computers, water measuring equipment and surveying instruments; read and make maps accurately; make accurate estimates of water volumes, diversion rates and conversions mentally and quickly to provide approximate answers to questions; recognize specific hydraulic engineering hardware in the field; recognize man-made features which indicate the pressure of a well or well driller; operate four-wheel drive vehicle in a variety of on and off road conditions.

**DEPARTMENT OF HUMAN RESOURCES****Bureau of Health Protection Services**

**Detailed knowledge of:** engineering principles and data such as surveying, consultation, investigation, evaluation, planning and design, construction and operation of public and private utilities, structure, building, machine, equipment, process work or project wherein the public welfare in the safeguarding of life, health or property is involved. **Working knowledge of:** mathematics to include differential and integral calculus for the purpose of understanding technical reports on fluid dynamics in open channels, full and partially full conduits and sheet flow. **Ability to:** check application documents against requirements in the regulations; write a comprehensive letter which describes in detail the corrections necessary to the project design in order to approve the project; review resubmissions; orally communicate with engineers and owners anything to do with their application and design, state regulations, codes, standards and fees; inspect and evaluate construction of projects; review and approve engineering standard design specifications and design details submitted by special districts who are delegated some regulatory review authority over their system;

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**MINIMUM QUALIFICATIONS (cont'd)**

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (cont'd)

**DEPARTMENT OF HUMAN RESOURCES****Bureau of Health Protection Services (cont'd)**

determine compliance with direction provided on new construction or on previously constructed infrastructure being inspected and direct correction actions; assist/consult with private and public sector on public health objectives and technical matters.

**UNIVERSITY OF NEVADA****UNLV - Telemedia Services**

**Knowledge of:** basic electronics and electricity necessary to troubleshoot television electronic equipment; safety precautions pertaining to electronic equipment. **Ability to:** read and understand electrical wiring and schematic drawings to effectively determine the problem or failure; remove components from or solder components to electronic circuit boards; perform large duplication of many programs and formats.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

**ALL OPTIONS**

**Knowledge of:** what other divisions' functions and capabilities are to judge what information should be passed on to different levels of management. **Ability to:** complete heavy workload within established time frames; perform under the stress of frequent interruptions and/or distractions; set priorities which accurately reflect the relative importance of the job responsibilities; exchange ideas, information and opinions with others to arrive at decisions, conclusions or solutions; establish and maintain effective working relationships with fellow employees and management to complete tasks quickly and with as few inconveniences as possible; speak on a one-to-one basis to obtain information and explain policies and procedures; interpret construction drawings, contract documents and technical specifications.

**DEPARTMENT OF TRANSPORTATION****Construction Division**

**Working knowledge of:** safety precautions necessary to protect the traveling public, department and contractor personnel when working in or about roadway work zones; the Federal Highway Administration's Manual on Uniform Traffic Control Devices; design methods and quantity calculation methods used by the department's design division so that plans and specifications can be reviewed properly; current construction practices; the operation of various materials testing equipment; the pay estimate system from start of cycle to finish in order to be aware of specific problems which may arise. **General knowledge of:** the department's office procedures to complete job duties; Rental Rate Blue Book for construction equipment. **Ability to:** operate various types of nuclear testing devices; analyze field construction data using statistical approach methods.

**Environmental Services Division**

**Knowledge of:** highway design; where to find prior water quality documents and floodplain documents; what water quality constituents to test; federal and State water quality and floodplain laws; federal highways guidance material for preparation of environmental documents; what must be addressed in the Draft Environmental Impact Statement to satisfy Federal Highway Administration requirements; the State and federal National Pollutant Discharge Elimination storm water permit; Nevada Revised Statutes and Nevada Administrative Code on water quality; drinking water systems utilizing ground and/or surface water; State drinking water standards; the health effects if a drinking water source is contaminated; how to correct contaminated drinking water source; propose changes, when necessary, on highway roadway runoff; types



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**MINIMUM QUALIFICATIONS** (cont'd)**FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES** (cont'd)**DEPARTMENT OF TRANSPORTATION** (cont'd)**Environmental Services Division** (cont'd)

and environmental effects of roadway runoff pollutants; what equipment supplies are needed for water quality testing; how many department projects will need water quality testing; how many tests will be needed for each department project. **Ability to:** establish valid water quality monitoring sites above and below proposed construction site on waterway; correlate the test results with State water quality standards; describe highway projects so others can visualize possible impacts to water quality; take drinking water samples for analysis; read and understand the capabilities of scientific water quality equipment to determine if they will meet the immediate and projected long term needs of the water quality section; make a decision on the best equipment that meets federal Environmental Protection Agency water quality testing standards.

**Operations Analysis Division**

**Ability to:** work independently laying out projects, performing complex analysis, and reporting the results with a minimum of supervision and remain accountable for timely and accurate completion of assigned tasks; write and modify existing computer programs on the State mainframe computer for sorting, merging, tabulating, graphing, and statistically analyzing pavement condition, construction, maintenance, and other costs.

**Road Design Division**

**Landscape, Maintenance, Railroad and Erosion Control Projects - Knowledge of:** different herbicides, insecticides, fertilizers and plant foods and how to use them appropriately to maintain the growth of grasses, trees, shrubs and flowers. **Ability to:** compare/inspect design work and judge whether it is similar to or different from prescribed standards.

**Roadway Design - Working knowledge of:** traffic control procedural manuals. **General knowledge of:** standard specification. **Knowledge of:** department policy memoranda. **Ability to:** perform mathematical calculations in the execution of daily design and checking work; establish and maintain project files.

**Specifications - Working knowledge of:** current construction practices related to the individual project and items of work as well as working knowledge of current Federal Highway Administration policies effecting the special provisions when federal funds are involved. **General knowledge of:** where to find more detailed and specific information on materials or construction methods. **Ability to:** interpret a set of construction plans; recognize specialized work and when an expert dealing in the type of work on a regular basis should be consulted to ensure all requirements will be properly addressed in the special provisions. **Skill to:** write detailed technical specifications and requirements for specific items needed for construction; organize data and write concise, logical, grammatically correct phrases or paragraphs that supersede, add to, or modify the standard specifications for a particular contract; describe an operation or method of construction in such detail as to present an accurate picture of what is to be accomplished; work on a variety of different projects, often changing from one project to another project of a different nature or scheduling sequence.

**Standard Plans - Ability to:** write clear and concise technically related text usable by technical and lay staff; compare plans or proposals for new and existing standards as presented by in-house staff or from outside the department; monitor and oversee construction and/or maintenance of special projects; compose technical reports used by the Federal Highway Administration and the department defining "experimental projects"; work independently utilizing resources as required by the task; convey to department personnel design requirements and oversee the construction of experimental or demonstration projects to meet test criteria.

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**MINIMUM QUALIFICATIONS** (cont'd)**FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES** (cont'd)**DEPARTMENT OF TRANSPORTATION** (cont'd)

**Traffic Design - Working knowledge of:** federal, State and department rules, regulations, laws, policies and procedures regarding the design, construction, operation and maintenance of traffic signal and lighting systems; the State's standards for road and bridge construction. **Ability to:** read and interpret electrical schematics and create and draft electrical one line diagrams; prepare plans, specifications, and estimates for the physical construction of highway lighting systems and traffic signal systems including roadway design items of work; write concise, logical, grammatically correct reports to explain change orders to contracts and supplemental notices to bidders; write technical reports on experimental pavement marking and signing projects; speak to groups of department and local government employees explaining department policies and procedures involving work zone traffic control; explain department policies and procedures to consulting engineers and engineers working for land developers with regard to plan formats and traffic control plan development; analyze information, problems, situations and procedures to design work zone traffic control plans, signing layouts and striping details.

**Districts**

**Working knowledge of:** principles and practices of traffic engineering to perform the duties and tasks assigned. **Ability to:** visualize effect on traffic flow caused by modifying highway signs or markings that provide guidance to drivers; make recommendations for modification of signs or markings that comply with established policy and guidelines that are clear and concise to the traffic maintenance crew or barricade company; inspect traffic control devices and judge whether they comply with prescribed standards set forth in federal and State guidelines; coordinate traffic control device changes to allow time to manufacture the signs and schedule crews.

**DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES****Division of Environmental Protection**

**Federal Facilities Bureau and Facility Management Branch - Working knowledge of:** the Nevada State Hazardous Waste Law, Nevada Administrative Code for Hazardous Waste Disposal and Code of Federal Regulations Title 40 Parts 260 through 270 relative to the regulation of hazardous waste generators and hazardous waste treatment, storage and disposal facilities; sampling techniques for soils, water and groundwater necessary to review or develop sampling plans as part of an inspection at a permitted facility or sampling associated with an ongoing remediation; toxicological principles necessary to set cleanup standards and personnel protection and safety procedures. **General knowledge of:** statistical methods used to assess ground water data in determining if a significant increase of contamination has occurred; other federal, State and local agencies' functions and responsibilities so as to coordinate permitting projects, enforcement actions and remediations.

**Bureau of Wastewater Treatment Services - Working knowledge of:** sanitary engineering, soils engineering, construction management, hydrology and treatment plant operation; applicable State and federal laws and regulations, discharge permit requirements, and water quality goals. **Ability to:** perform technically sound reviews in a timely manner; perform inspections to verify compliance with discharge permit requirements, applicable laws and regulations and construction management principles.

**Division of Water Planning**

**Knowledge of:** procedures necessary in processing a water right; assess the social, economic and environmental effects of water policy. **Ability to:** read and understand technical documents such as survey maps, statistical charts and tables and clearinghouse reports.

## OPTIONS

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**MINIMUM QUALIFICATIONS (cont'd)**

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (cont'd)

**DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES (cont'd)****Division of Water Resources**

**Working knowledge of:** Nevada Water Law, rulings and orders of the State Engineer, policies of the division, regulations for the drilling of water wells and related drilling, certain court actions' interstate compacts, intrastate water agreements and federal government water policies; procedures to conduct hearings.

**Ability to:** write concise, logical, grammatically and factually correct draft rulings of the State Engineer or analytical reports to advise the State Engineer on water related issues.

**DEPARTMENT OF HUMAN RESOURCES****Bureau of Health Protection Services**

**Knowledge of:** public health engineering, both regulatory and technical, in order to remain current in a changing field. **Ability to:** investigate allegations of public health hazards and direct corrective action.

**UNIVERSITY OF NEVADA****UNLV - Telemedia Services**

**Working knowledge of:** preventive maintenance procedures in the technical manuals; broadband networks sufficient to install new networks or troubleshoot problems in operating ones; television productions of various types. **Knowledge of:** basic electronics and electricity necessary to troubleshoot television electronic equipment; safety precautions pertaining to electronic equipment; basic and routine preventive maintenance of television equipment. **Ability to:** read and understand electrical wiring and schematic drawings to effectively determine the problem or failure; remove components from or solder components to electronic circuit boards; maintain service stock spare parts and determine what additional spares are required as new television equipment is purchased; diagnose video and audio problems to determine if the problem is hardware or software; setup and test all television equipment delivered to the agency ensuring the correct system; schedule the video duplication of program material; coordinate with faculty and staff on television installations, cabling and wiring needs; install new television systems for the end user making sure the equipment is operating properly; perform large duplication of many programs and formats.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

**6.228**

ESTABLISHED: 7/1/93P  
8/31/92PC  
REVISED: 11/17/93UC  
REVISED: 9/18/95UC  
REVISED: 7/1/01LG